

**Archaeological geophysical survey at
The East of England Showground
Peterborough
November 2014**

Report No. 15/5

Author: Adam Meadows

Illustrator: Adam Meadows



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OASIS REPORT

PROJECT DETAILS		Oasis No. molanort1-199975	
Project name		Archaeological geophysical survey at the East of England Showground, Peterborough	
Short description		MOLA Northampton was commissioned to carry out a detailed magnetometer survey on land at the East of England Showground in Peterborough. The survey identified possible linear features in the south-west corner of the site, medieval ridge and furrow and modern pipes.	
Project type		Geophysical survey	
Site status		None	
Previous work		None	
Current Land use		Pasture	
Future work		Unknown	
Monument type/ period		Unknown	
Significant finds		None	
PROJECT LOCATION			
County		Cambridgeshire	
Site address		East of England Showground, Peterborough	
Study area		c 6ha	
OS Easting & Northing		NGR TL 513 295	
Height OD		c 20m aOD	
PROJECT CREATORS			
Organisation		MOLA Northampton	
Project brief originator		Rebecca Casa-Hatton, Peterborough City Council	
Project design originator		MOLA Northampton	
Director/Supervisor		Adam Meadows	
Project Manager		John Walford MOLA, Myk Flitcroft CgMs	
Sponsor or funding body		CgMs Consulting	
PROJECT DATE			
Start date		12 November 2014	
End date		14 November 2014	
ARCHIVES		Location	Content
Physical		N/A	
Paper		MOLA Northampton	Site survey records
Digital			Geophysical survey & GIS data
BIBLIOGRAPHY		Journal/monograph, published or forthcoming, or unpublished client report	
Title		Archaeological geophysical survey at the East of England Showground, Peterborough November 2014	
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Archaeological geophysical survey at the East of England Showground, Peterborough November 2014

ABSTRACT

MOLA Northampton was commissioned to carry out a detailed magnetometer survey on land at the East of England Showground in Peterborough. The survey identified possible linear features in the south-western corner of the site, medieval ridge and furrow and modern pipes.

1 INTRODUCTION

MOLA Northampton was commissioned by CgMs Consulting to undertake a detailed magnetometer survey on c 6ha of land on the East of England Showground, south of Oundle Road in Peterborough (NGR TL 513 295; Fig 1). The purpose of the survey was to contribute towards an assessment of the archaeological impacts of a proposed development site. The fieldwork was undertaken from 12th November to 14th November 2014.

2 BACKGROUND

2.1 Location and geology

The proposed development site comprises two pasture fields. The western field is bounded by palisade fencing to east with the A1 to the west and the A605 flyover to the north. The second field lies to the east and is located along the northern edge of a farm track. This area was the location of a pitch and putt course, though it is now pasture for sheep grazing.

The majority of the survey area lies on a very gentle west-facing slope going from 28m aOD to the east down to 20 aOD to the west. The underlying geology is mapped as Oxford Clay and strata of the Kellaways Formation (BGS 2014).

2.2 Historical and archaeological background

The survey area shares one boundary with that of the modern day A1 which runs along Ermine Street Roman road. This Roman road runs through the Roman town of *Durobrivae* located within a mile north of the site. Further evidence of Roman occupation in the area come from sherds of pottery that were discovered near the north-western boundary of the survey area during a watching brief for the construction of the A605 flyover in 1976 (CHER 02109). Near this flyover, in 1998, c 300m west of the survey area more Roman pottery was found (CHER 01881, CHERCB14731).

At the northern limit of the eastern field there are two post-medieval almshouses that were recorded as derelict in 1979. They have since been restored and registered as Grade 2 listed in 1981 (English Heritage Building ID: 50287).

3 METHODOLOGY

The magnetometer survey was conducted with Bartington Grad 601-2, twin sensor array, vertical component fluxgate gradiometers (Bartington and Chapman 2003). These are standard instruments for archaeological survey and can resolve magnetic variations as slight as 0.1 nanoTesla (nT).

An independent network of 30m grid squares was established within each of the fields to be surveyed. The grids were set out with a tape measure and optical square and were tied in to the Ordnance Survey National Grid by means of a Leica Viva RTK GPS. The gradiometers were carried at a brisk but steady pace through each grid square, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per square. All fieldwork methods complied with the guidelines issued by English Heritage (EH 2008; IfA 2011) .

The survey data was largely processed using Geoplot 3.00v software. Most of the striping was removed using the 'Zero Mean Traverse' function but some areas had to be de-striped separately, using a spreadsheet based routine, in order to preserve linear anomalies lying parallel to the traverse direction. Destaggering of the data was performed where necessary. The processed data is presented in this report in the form of greyscale plots at a range of +4nT (black) to -4nT (white). These have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Figs 2, 3 and 4). Interpretive overlays are presented in Figure 3, and plots of the unprocessed survey data are presented in Figure 4.

4 SURVEY RESULTS

4.1 Archaeology

The survey has detected a number of small linear anomalies located in the south-western corner of the survey area. These may represent possible ditches, the age and origin of which are unknown.

The most prominent feature within the western field is a series of linear anomalies that aligned west-south-west to east-north-east. These represent ridge and furrow cultivation of probable medieval origin.

4.2 Ferrous anomalies

The survey has detected a number of dipolar linear anomalies, the orientation of these vary but generally go north to south. These represent pipelines that contain or are constructed of materials that emit a magnetic response.

The data gathered from the eastern portion of the western field have readings that are strongly indicative of rubble and other such waste within the soils. The eastern field was used as a pitch and putt golf course as recently as 2011. It has since been removed and the earthworks levelled. This may account for the magnetic readings detected within this area.

The data contains a number of individual dipolar anomalies seemingly distributed randomly across the survey area. Most of these will relate to minor pieces of scrap metal within the soil.

5 CONCLUSION

The survey have detected anomalies of possible archaeological origin in the south-western corner of the western field. These are of uncertain date and origin. Evidence for medieval cultivation was present in the form of ridge and furrow. Elsewhere on site modern disturbance is present in the form of services and probable modern debris incorporated into the topsoil.

BIBLIOGRAPHY

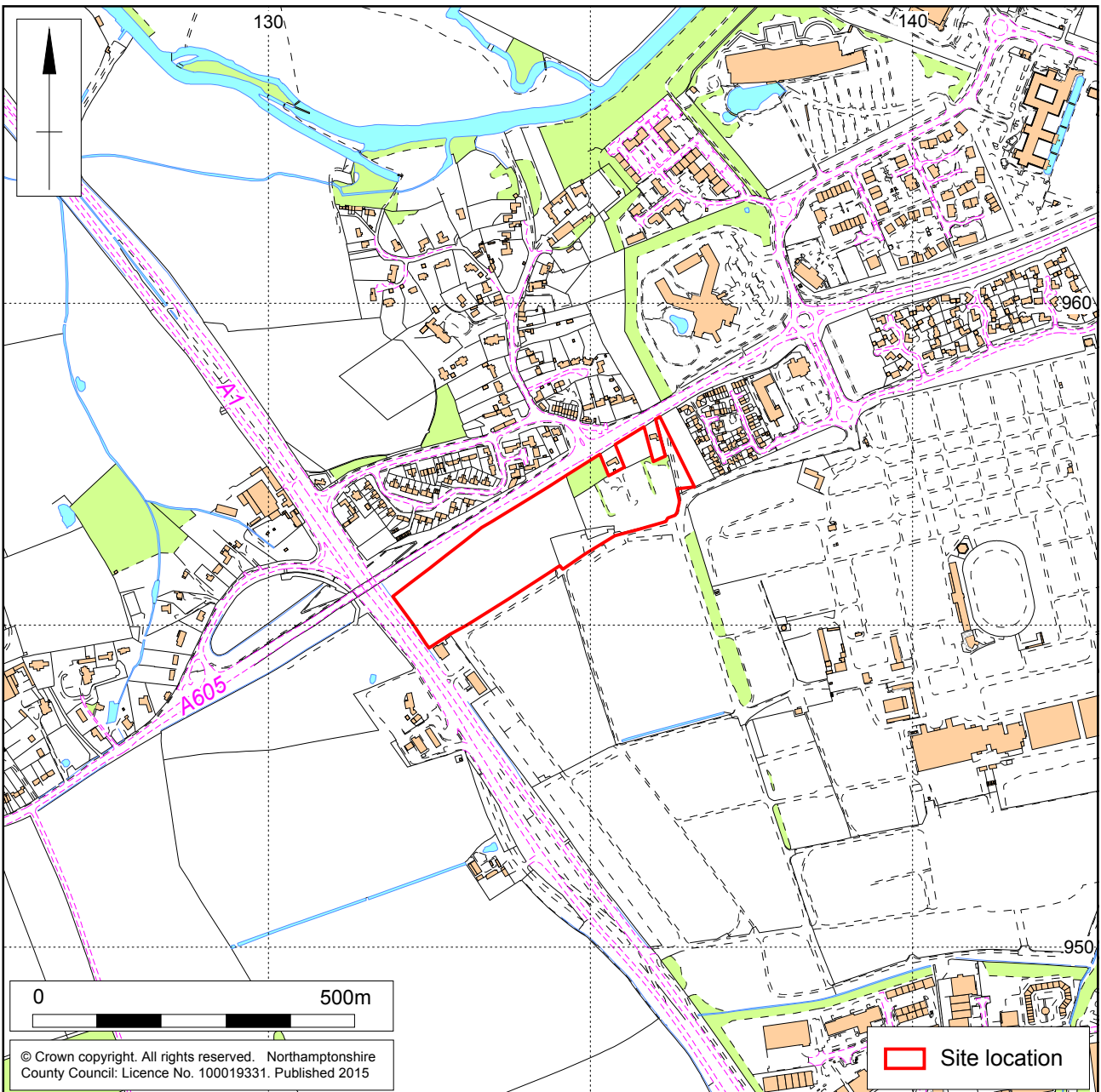
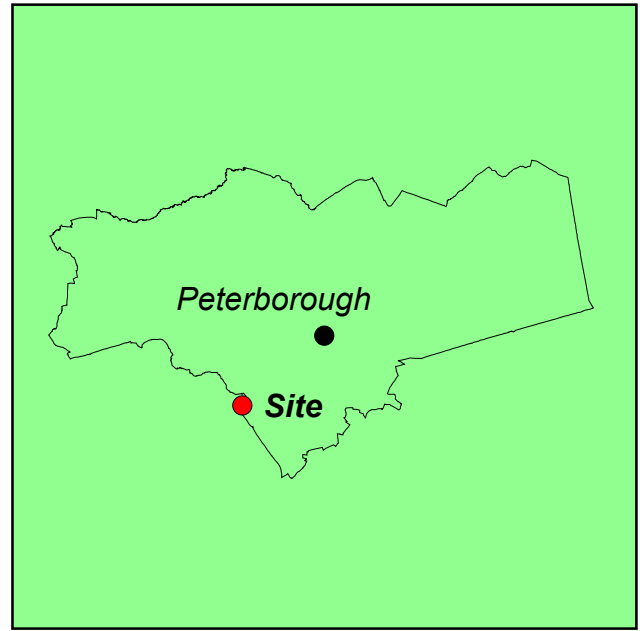
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Scale 1:10,000

Site Location Fig 1









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